

Listing of Claims:

1. (Currently Amended) A device for cooling heat-generating electrical or electronic components having a non-uniform output profile, comprising a heat-conducting unit (1) and a heat-absorbing unit which contains a phase change material (4), wherein the phase change material is arranged in such a way that heat flow from the electrical or electronic component is preferentially to the heat-conducting unit (1) is not interrupted and a majority of significant heat flow to the phase change material from the electrical or electronic component only occurs if only when the temperature of the heat-conducting unit (1) exceeds phase change temperature T_{PC} of the phase change material.
2. (Originally Presented) The device according to claim 1, wherein the phase change material-containing unit (4) contains at least one cavity (6) into which the phase change material has been introduced, where the cavities (6) are formed by the heat-absorbing unit (4).
3. (Originally Presented) The device according to claim 1, wherein the phase change material containing unit (4) additionally contains a liquid/gaseous heat transfer medium (5).
4. (Originally Presented) The device according to claim 3, wherein the liquid/gaseous heat transfer medium (5) is a halogenated hydrocarbon.

5. (Originally Presented) The device according to claim 1, wherein a solid-solid phase change material is employed.

6. (Originally Presented) The device according to claim 1, wherein the phase change material is encapsulated.

7. (Originally Presented) The device according to claim 1, wherein the heat-conducting unit (1) has surface area-increasing structures.

8. (Originally Presented) The device according to claim 1, wherein the heat-conducting unit (1) has cooling fins.

9. (Currently Amended) A component (Z), comprising a cooling device according to claim 1, a heat-generating electronic component having non-uniform output (2), wherein units (1), (4) and component (2) are arranged in such a way that the heat flow between the heat-generating electronic component (2) and the heat-conducting unit (1) takes place in direct contact.

10. (Currently Amended) A component (Z) according to claim 9, wherein the heat-generating electronic component (2) is a computer CPU or memory chip.

11. (Originally Presented) A computer containing a component (Z) according to claim 9.

12. (Originally Presented) An electronic data processing system containing a device according to claim 1.

13. (Originally Presented) A mobile communication power switch or power circuit, a mobile telephone or fixed transmitter transmission circuit, an electromechanical actuator control circuit, a satellite communication or radar application high frequency circuit, or a domestic appliance or industrial electronic actuator or control unit, comprising a device according to claim 1.

14. (Originally Presented) A device for absorbing heat, comprising a heat sink and a heat absorbing component containing a phase change material, wherein heat flows from the heat sink to the heat absorbing component when the heat sink temperature exceeds the phase change temperature of the phase change material.

15. (Originally Presented) A device for absorbing heat, comprising a heat sink means and a heat absorbing means containing a phase change material, wherein heat flows from the heat sink means to the heat absorbing means when the heat sink temperature exceeds the phase change temperature of the phase change material.

16. (Originally Presented) A device for absorbing heat, comprising, in contact with a heat-generating electric or electronic component, a heat sink and a heat absorbing component containing a phase change material, wherein heat flows from the heat sink to the heat absorbing component when the heat sink temperature exceeds the phase change temperature of the phase change material.

17. (Newly Added) A method for absorbing heat from a heat generating electronic or electric component, having a non-uniform output profile, comprising contacting said electric or electronic component with a heat sink and a heat absorbing component containing a phase change material, wherein heat flows from the heat sink to the heat absorbing component when the heat sink temperature exceeds the phase change temperature of the phase change material.

18. (Newly Added) A method according to claim 17, wherein the heat sink temperature exceeds the phase change temperature of the phase change material at peak output of the electric or electronic component.

19. (Newly Added) A method according to claim 17, wherein heat from the electric or electronic component flows directly to the heat sink.

20. (Newly Added) A device according to claim 1, wherein the heat absorbing component is in direct contact with the electric or electronic component.

21. (Newly Added) A device according to claim 14, wherein the heat absorbing component is in direct contact with the electric or electronic component.